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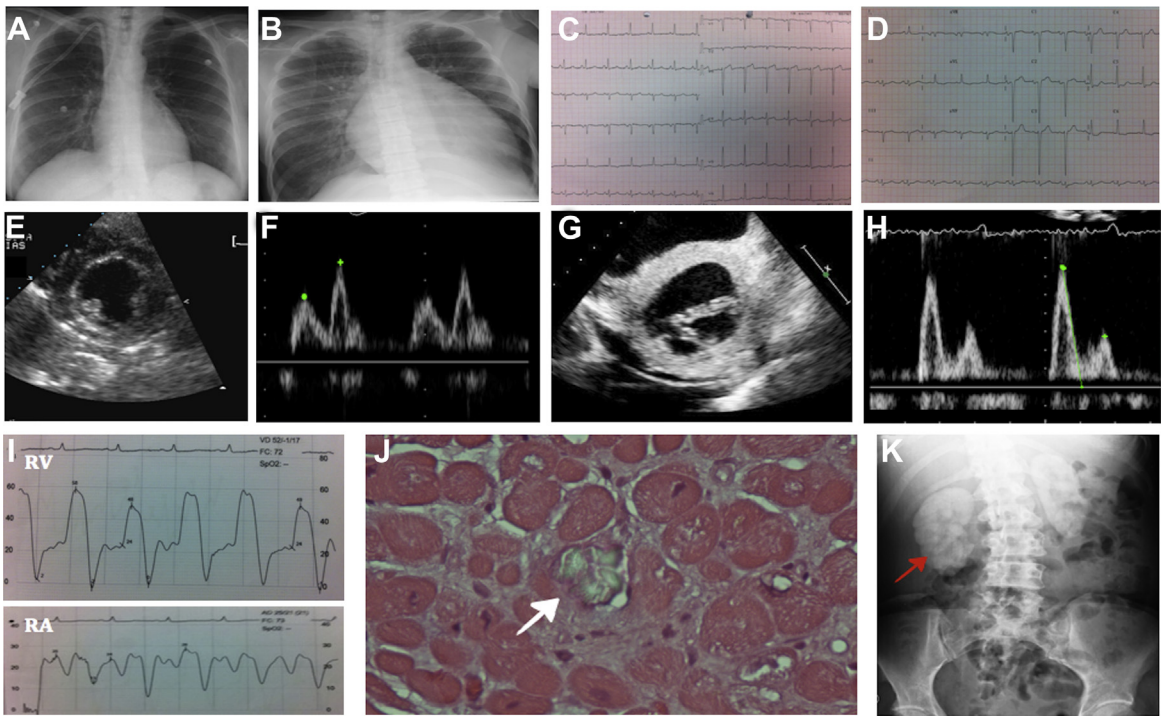
IMAGES IN CARDIOLOGY

Myocardial Infiltration by Oxalate

A Rare Case of Cardiomyopathy by Accumulation of Oxalate in a 53-Year-Old Woman

Pablo Jorge, MD,* Martín J. García González, MD, PhD,* Sagrario G. Rebollo, MD, PhD,† Sonia García, MD, PhD,‡ Francisco Bosa, MD, PhD,* Ignacio Laynez, MD, PhD,* Alejandro De la Rosa, MD, PhD*

Tenerife, Spain



From the *Cardiology Department, Complejo Hospitalario Universitario de Canarias, Tenerife, Spain; †Nephrology Department, Complejo Hospitalario Universitario de Canarias, Tenerife, Spain; and the ‡Pathological Anatomy Department, Complejo Hospitalario Universitario de Canarias, Tenerife, Spain.
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A 53-year-old woman had a cardiac deposit of oxalate due to primary hyperoxaluria causing progressive dilated and restrictive cardiomyopathy, with some admissions for heart failure. Primary hyperoxaluria is a very uncommon liver disease, and myocardial involvement is rare and characterized by progressive diastolic dysfunction, which precedes systolic dysfunction that may occur over time. These patients usually have a poor prognosis, and many require a kidney and liver transplantation. Chest x-rays before diagnosis **(A and B)** and those obtained 1 year after diagnosis **(C and D)** show significant cardiomegaly. Electrocardiography shows a progressive increase in ventricular chambers **(E to H**, Online Videos 1, 2, and 3). Echocardiographic evolution shows a restrictive pattern of diastolic function and myocardial shiny appearance. Hemodynamic study of the right atrium (RA) venous pulse curve showed a restrictive pattern with deep descent of x and y and the right ventricle (RV) with early diastolic dip plateau phase **(I)**. An endomyocardial biopsy was performed, revealing the presence of calcium oxalate crystals **(arrow in J)**. Nephrocalcinosis was seen **(red arrow in K)**, and a diagnosis, based on criteria, of primary hyperoxaluria was made.